Table 1. 68HC05 General-Purpose Microcontrollers (continued)

Part Number	ROM	RAM	EEPROM	Timer	I/O*	Serial	A/D	PWM	Display Drive	Package Option	Comments
68HC05T7	8K	320	-	16-Bit – 1 IC, 1 OC, RTC	28	I2C	1 Ch, 8-Bit	9 Ch, 6-Bit	On-Screen Display	56-B	
68HC05T10	12K	320	-	16-Bit – 1 IC, 1 OC, RTC	28	I2C	1 Ch, 8-Bit	8 Ch, 6-Bit	On-Screen Display	56-B	
68HC05X4	5K	176	-	16-Bit – 1 IC, 1 OC, RTI, WDOG	16	MCAN	-	-	-	28-DW	

*I/O Category includes Inputs, Outputs, and Bidirectional

Table 2. MC68HC05 One-Time Programmable/Emulator Microcontrollers

Part Number	EPROM	RAM	EEPROM	Timer	I/O*	Serial	A/D	PWM	Display Drive	Desp.	Comments
68HC705B16	15K	352	255	16-Bit – 2 IC, 2 OC, WDOG	32	SCI	8 Ch, 8-Bit	2 Ch, 8-Bit	-	52-FN, 64-FU	Software Selectable Slow Mode
68HC705B5	6K	176	-	16-Bit – 1 IC, 1 OC, WDOG	32	SCI	8 Ch, 8-Bit	2 Ch, 8-Bit	-	56-B, 52-FN	2 Channel PWM
68HC705C5	5K	176	128	16-Bit – 1 IC, 1 OC, WDOG	32	SIOP	-	-	-	40-P, 40-S, 44-FN	10 mA Sink Port, LVI Option
68HC705C8	8K	304	-	16-Bit – 1 IC, 1 OC	31	SPI, SCI	-	-	-	40-P, 40-S, 44-FB,44-FN	0 — 4.0 MHz Bus Speed, LVI Option
68HC705C9	16K	352	-	16-Bit – 1 IC, 1 OC, WDOG	31	SPI, SCI	-	-	-	40-P, 40-S, 44-FN	Expanded Port D
68HC705D9	16K	352	-	16-Bit – 1 IC, 1 OC, WDOG	31	SCI	-	5 Ch 6-Bit	8 Ch LED	40-P, 40-S, 44-FN	24 mA Sink Port
68HC705E1	4K	368	-	15-Stage – RTI, WDOG, RTC	20	-	-	-	-	28-P, 28-S, 28-DW	Internal PLL, Clock Synthesizer
68HC705F6	4K	320	-	16-Bit – 1 IC, 1 OC	30	SPI	-	-	8 Ch LED	42-B	DT MF, Tone Generator
68HC705G1	12K	176	-	16-Bit – 1 IC, 1 OC, WDOG, RTC	40	SPI	4 Ch, 8-Bit	4 Ch, 8-Bit	-	56-B, 64-FU	PLL, Two Power Saving Standby Modes
68HC705G10	12K	304	-	15-Stage – RTC	65	-	8 Ch, 8-Bit	-	-	100-FU	Keyboard Control, Power Management
68HC705G9	12K	304	-	15-Stage – RTC	68	Dual SCI	8 Ch, 8-Bit	-	-	160-FT	Keyboard Control, Power Management
68HC705H2	2K	128	-	15-Stage – RTI, WDOG	16	SIOP	-	2 Ch, 8-Bit	-	40-P, 44-FN	Dual LDMOS, H-Bridge Drivers
68HC705J2	2K	112	-	15-Stage – RTI, WDOG	14	-	-	-	-	20-P, 20-S, 20-DW	Low Cost
68HC705K1	0.5K	32	-	15-Stage – RTI, WDOG	10	-	-	-	-	16-P, 16-DW	8 mA Sink Port, 8 Bytes Personality EPROM
68HC705L1	6K	128	-	-	-	-	-	-	-	56-B	
68HC705L5	8K	256	-	16-Bit – 1 IC, 1 OC	39	SPI, SIOP	-	-	39x4 Seg LCD	80-FU	8-Bit Event Counter
68HC705P6	4.6K	176	-	16-Bit – 1 IC, 1 OC, WDOG	21	SIOP	4 Ch, 8-Bit	-	-	28-P	
68HC705P9	2K	128	-	16-Bit – 1 IC, 1 OC, WDOG,	21	SIOP	4 Ch, 8-Bit	-	-	28-P, 28-S, 28-DW	Low-Cost
68HC705T10	12K	320	-	16-Bit – 1 IC, 1 OC, RTC	28	I²C	1 Ch, 8-Bit	8 Ch, 6-Bit	On-Screen Display	56-B	
68HC705T3	24K	512	-	16-Bit – 1 IC, 1 OC, WDOG	30	SIOP	1 Ch, 6-Bit	9 Ch, 6-Bit	On-Screen Display	40-P	
68HC705T4	6K	96	-	16-Bit – 1 IC, 1 OC, WDOG	16	-	1 Ch, 4-Bit	5 Ch, 6-Bit	On-Screen Display	42-B	

Table 2. MC68HC05 One-Time Programmable/Emulator Microcontrollers (continued)

[illegible]	[illegible]	[illegible]	[illegible]	Timer	I/O*	Serial	A/D	PWM	Display Drive	Devp.	Comments
68HC705X4	5K	176	-	16-Bit – 1 IC, 1 OC, WDOG, RTI	16	MCAN	-	-	-	28-DW	
68HC805B6	-	176	6K + 256	16-Bit – 2 IC, 2 OC, WDOG	32	SCI	8 Ch, 8-Bit	2 Ch, 8-Bit	-	52-FN	432 Bytes ROM
68HC805C4	-	176	4K	16-Bit – 1 IC, 1 OC	28	SPI, SCI	-	-	-	40-P, 44-FN	Low-Voltage and High Speed Vers. Available

Definitions for Tables 1 and 2

General Definitions

DTMF	Dual-Tone Multi-Frequency
IC	Input Capture
I2C	Inter-Integrated Circuit
LVI	Low-Voltage Interrupt
LVPI	Low Voltage Program Inhibit
MMU	Memory Management Unit
OC	Output Compare
OSD	On-Screen Display
PLL	Phase-Lock Loop
PWM	Pulse Width Modulation
RTC	Real-Time Clock
RTI	Real-Time Interrupt
SCI	Serial Communications Interface
SIOP	Simple Serial I/O Port
SPI	Serial Peripheral Interface
VFD	Vacuum Fluorescent Display
WDOG	Watch Dog Timer

Package Definitions

B	Shrink Dual-in-Line Plastic
DW	Small Outline (Wide-Body SOIC)
FA	7x7 mm Quad Flat Pack (QFP)
FB	10x10 mm Quad Flat Pack (QFP)
FN	Plastic Quad (PLCC)
FS	Cerquad
FT	28x28 mm Quad Flat Pack (QFP)
FU	14x14 mm Quad Flat Pack (QFP)
L	Ceramic Sidebraze
P	Dual-in-Line Plastic
S	Cerdip (windowed or non-windowed)